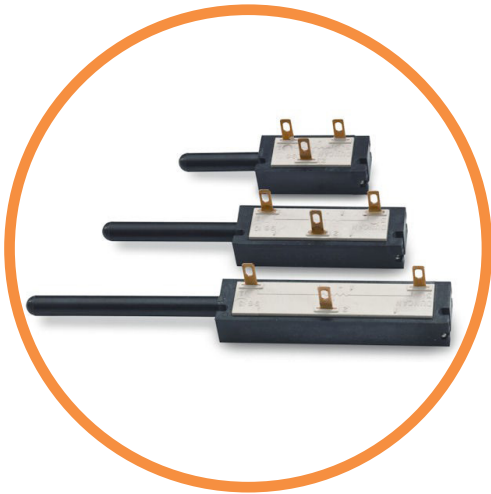




## 9600 SERIES

Spring Return Linear Position Sensor



### Introduction

The 9600 Series Linear Position Sensor, is designed for a variety of space-limited feedback applications that require high accuracy. It is ideally suited for Industrial, vehicular, appliance, machine tool and robotic applications due to the unit's high temperature stability. The solderable terminal tabs, suitable for use with .110" (2.8mm) PDQ styled crimped wiring lugs, and durable spring-loaded plunger, make installation and operation easy.

The 9600 Series is available in three standard sizes and provides excellent life at 1,000,000 full cycles (5 million dither cycles), which means high reliability in demanding installations.



### SPECIFICATIONS

#### Mechanical

	9605	9610	9615
<b>Power Rating at 70°C, Watts</b>	0.25	0.50	0.75
<b>Mechanical Travel <math>\pm .015</math> (<math>\pm 0.4</math>) (B) inches (mm)</b>	0.56 (14.2)	1.06 (26.9)	1.56 (39.6)
<b>Housing Length <math>\pm .015</math> (<math>\pm 0.4</math>) (C) inches (mm)</b>	1.06 (26.9)	1.56 (39.6)	2.06 (52.3)
<b>Terminal Spacing (D) inches (mm)</b>	0.30 (7.6)	0.50 (12.7)	0.80 (20.3)
<b>(E) inches (mm)</b>	0.20 (5.1)	0.50 (12.7)	0.70 (17.8)
<b>Fully Extended Length <math>\pm .015</math> (<math>\pm 0.4</math>) (F) inches (mm)</b>	0.810 (20.6)	1.310 (33.3)	1.810 (46.0)

#### Electrical

	9605	9610	9615
<b>Part Number</b>	9605R1.7KL2.0	9610R3.4KL2.0	9615R5.1KL2.0
<b>Total Electrical Travel (A) inches(mm)</b>	0.50 (12.7)	1.00 (25.4)	1.50 (38.1)
<b>Total DC Resistance <math>\pm 25\%</math></b>	1.7K	3.4K	5.1K
<b>Linearity Over Active Electrical Travel</b>	$\pm 2\%$		
<b>Best Practical Linearity (Option)</b>	$\pm 1.0\%$	$\pm 0.5\%$	$\pm 0.35\%$

## Environmental

<b>Mechanical Life</b>	1,000,000 Full Cycles; 5,000,000 Dither Cycles
<b>Stop Strength oz. (Newtons)</b>	360 (100)
<b>Actuation Force oz. (Newtons)</b>	14.4 (4.0) Maximum, supplied with internal spring to return actuator to extended position
<b>Humidity</b>	95% @ 38°C
<b>Vibration</b>	15g's 50 to 1,000Hz, 2 hrs, each axis
<b>Shock</b>	Up to 50g's
<b>Temperature Limits</b>	-40°C to +135°C

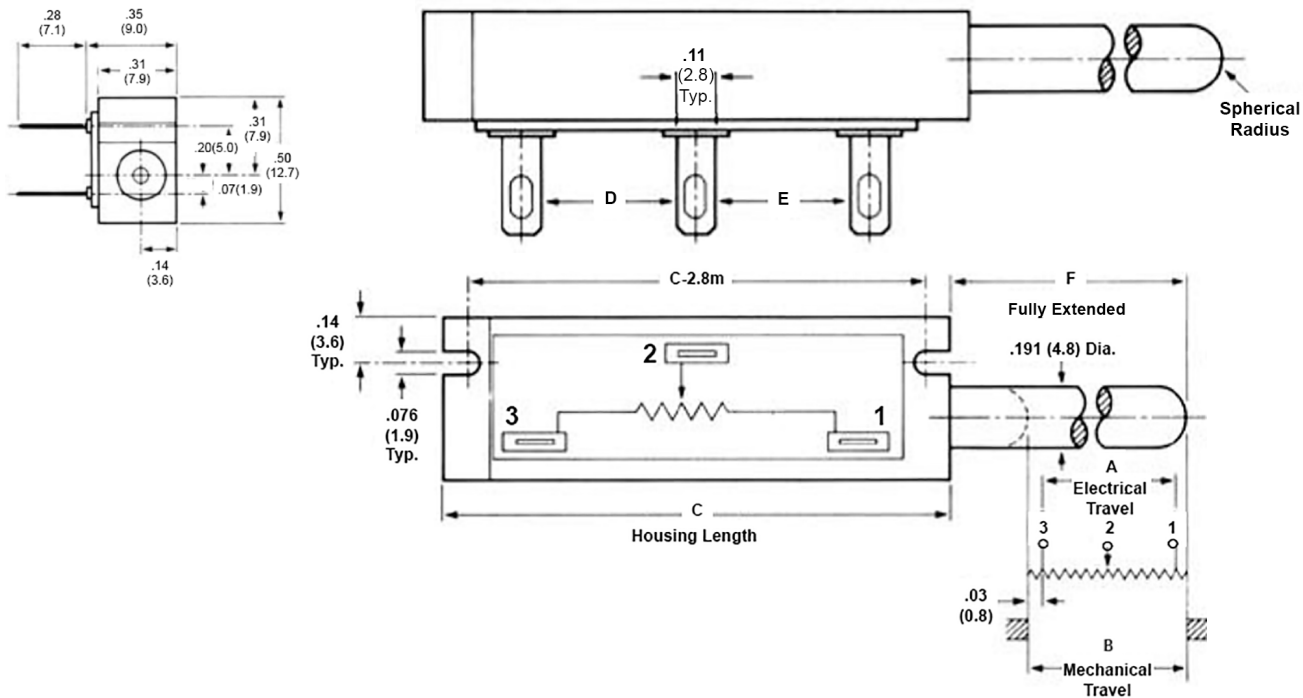
NOTES & TABLES: All notes and tables referred to in the text can be found in this document.



## DIMENSIONS

TOLERANCES: .XX = ±0.01, .XXX = ± 0.005

All dimensions are in inches [millimeters]



## ORDERING OPTIONS

Order the 9600 series linear potentiometers by the part number as show in the Electrical Specifications table on the first page

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